

Express Terms  
and  
Purpose and Rationale Statement  
for Work Group 9:M Occupancies  
Section 406.7

**EXPRESS TERMS**

**Add to Section 406 Motor-Vehicle-Related Occupancies**

Definitions:

***Electric Vehicle*** is an automotive-type vehicle for highway use, such as passenger automobiles, buses, trucks, vans and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array or other source of electric current. For the purpose of this code, electric motorcycles and similar type vehicles and off-road self-propelled electric vehicles such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats and the like, are not included

**Section 406.7 Electric Vehicle Charging** In any building or interior area used for charging electric vehicles, electrical equipment shall be installed in accordance with the California Electrical Code.

**406.7.1 Ventilation.** Mechanical exhaust ventilation, when required by the California Electrical Code shall be provided at a rate as required by Article 625 or as required by Section 1203 of the International Building Code whichever is greater. The ventilation system shall include both the supply and exhaust equipment and shall be permanently installed and located to intake supply air from the outdoors, and vent the exhaust directly to, the outdoors without conducting the exhaust air through other spaces within the building.

**Exception:** Positive pressure ventilation systems shall only be allowed in buildings or areas that have been designed and approved for that application.

**406.7.2 Electrical Interface.** The electrical supply circuit to electrically powered mechanical ventilation equipment shall be interlocked with the recharging equipment used to supply the vehicle(s) being charged, and shall remain energized during the entire charging cycle. Electric vehicle recharging equipment shall be marked or labeled in accordance with the California Electrical Code.

**EXCEPTIONS:** 1. *Exhaust ventilation shall not be required in areas with an approved engineered ventilation system, which maintains a hydrogen gas concentration at less than 25 percent of the lower flammability limit.*

2. *Mechanical exhaust ventilation for hydrogen shall not be required where the charging equipment utilized is installed and listed for indoor charging of electric vehicles without ventilation.*

## **PURPOSE AND RATIONALE STATEMENT**

(N) Add code language to the model code that is not currently addressed. Federal and State legislation encourage the use of zero pollution vehicles in the public and private sectors. The State of California encourages the sale and use of electric vehicles through legislation and incentives. Electric Vehicle charging stations can be installed in any occupancy, including residential, commercial, retail and public buildings. The Office of the State Fire Marshall amended the 1998 California Building Code to include provisions for the installation of electric vehicle charging stations. These provisions are in the current code but not in the proposed code. The following provisions are recommended for adoption into the model code to provide an equivalent level of protection to the current State Code.